

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all previous listings of claims in this application.

Listing of Claims

1-39. (Canceled)

40. (New) A method for isolating a nucleic acid molecule encoding an inward rectifier, G-protein activated, potassium channel from a sample comprising:

- (a) isolating nucleic acids from the sample;
- (b) contacting the isolated nucleic acids with a nucleic acid probe having a sequence comprising at least 15 nucleotides of SEQ ID NO:1 or complement thereof under conditions permitting the formation of a complex between said nucleic acid probe and a nucleic acid molecule encoding an inward rectifier, G-protein activated, potassium channel in said isolated nucleic acids, wherein the nucleic acid probe specifically hybridizes with the nucleic acid sequence of SEQ ID NO:1 or complements thereof;
- (c) isolating the complex;
- (d) separating the nucleic acid molecule encoding an inward rectifier, G-protein activated, potassium channel from the nucleic acid probe; and
- (e) assaying the protein encoded by the nucleic acid molecule for a biological activity of the inward rectifier, G-protein activated, potassium channel encoded by SEQ ID NO:1.

41. (New) A method of claim 40, wherein the nucleic acid probe is labeled with a detectable marker.